

University of Massachusetts Amherst  
**ScholarWorks@UMass Amherst**

---

Travel and Tourism Research Association:  
Advancing Tourism Research Globally

2016 ttra International Conference

---

# Visual Logic and Appeal Perception of Working Farmlands: Moderating Role of Involvement, Experience Use History and Agrographics

Shahab Nazariadli  
*North Carolina State University*

Follow this and additional works at: <https://scholarworks.umass.edu/ttra>

---

Nazariadli, Shahab, "Visual Logic and Appeal Perception of Working Farmlands: Moderating Role of Involvement, Experience Use History and Agrographics" (2016). *Travel and Tourism Research Association: Advancing Tourism Research Globally*. 12.  
[https://scholarworks.umass.edu/ttra/2016/Grad\\_Student\\_Workshop/12](https://scholarworks.umass.edu/ttra/2016/Grad_Student_Workshop/12)

This Event is brought to you for free and open access by ScholarWorks@UMass Amherst. It has been accepted for inclusion in Travel and Tourism Research Association: Advancing Tourism Research Globally by an authorized administrator of ScholarWorks@UMass Amherst. For more information, please contact [scholarworks@library.umass.edu](mailto:scholarworks@library.umass.edu).

## **Visual Logic and Appeal Perception of Working Farmlands: Moderating Role of Involvement and Agrographics**

Tourists mostly select destinations based on appeal and image (Smith & Colgate, 2007). However, agritourism microentrepreneurs are not entirely aware of tourists' preferences about the way their land should look. Further, while urban market segments often declare interest in visiting rural attractions, agritourism is still largely a niche tourism activity (Gao, Barbieri & Valdivia, 2014). Understanding the visitors' preferences is of high importance for microentrepreneurs to better adjust and program their marketing tactics, their tourism experiences, and their land. For this reason, we identified two factors (i.e., involvement in agritourism and agricultural demographics) that we predict will moderate or mediate the way people perceive agricultural landscapes.

The conceptual framework underpinning this research revolves around the constructs which implicate livelihoods and well-being of agritourism microentrepreneurs (agripreneurs). Namely it consists concepts of urbannormativity and self-representation. These concepts are highly interrelated interdependent which in a wider scope they are related to post colonialism theories and orientalism. Basically, from the critical theory perspective, this research proposes participatory action research method to probe into the relation between the Orient-Occident and urban-rural. Urbannormativity grows out of a popular culture that distorts rural reality and contributes to the idea that urban is the way forward while rural is the way backward.

Further, the discrepancy between touristic representations and reality in destinations has been extensively researched (Cohen 1993; Echtner & Prasad 2003) but not around agricultural practices. Indeed, most authors agree that the industry builds images of destinations to match the desires of dominant generating markets. Despite the growing body of research on the politics of touristic representations, differences between external and internal representations of one destination have not been studied. (Bandyopadhyay & Morais, 2005). But for this comparative comprehension, and mainly understanding the urbanites' visual perception of farmlands, a rigorous research design is essential. For this sake, this study firstly chiefly attempts to examine the validity and reliability of two dimensional imagery for data elicitation on online platform survey. Therefore, a germane construct for this examination was brought up from arts-related literature, namely as "visual logic".

Visual logic theory consists of six principles of ambiguity and meaning, control of direction, ecological relationships, tension, unity, and realism. The direction principle indicate that the image-maker can control how the observer sees the image in a way that can move his/her eyes toward specific targeted point. The image-maker can emphasize any specific points of the image and subordinate other elements in order to attract the eye of beholder (Leuween & Jewitt, 2001). However, this will not guarantee that observers will be lured to that specific points while there is different levels of relevance and engagement created between the sender and receiver. It has the ability to beguile the viewer if they are artfully utilized. An array of visualization methods are being increasingly used to examine tourist preferences (e.g., Oculus Rift, eye tracking systems), however, researchers have not yet acknowledged that the structure of the visual stimuli utilized in their research may affect the research subjects' responses. We contend that research is needed to calibrate visualization methods and to improve the validity of the methods.

Accordingly, the purpose of this study was to examine the effect of visual logic manipulations on perceptions of the appeal of agricultural landscapes. Further to disentangle the moderating role of agrography and involvement in the effectiveness of visual composition of pictured working farm destinations. The resulting data will enable agritourism microentrepreneurs understand different customers' landscape preferences and customize their visual marketing strategies and their land management practices accordingly. Data will be collected through the administration of an online "Qualtrics" survey to a sample of respondents recruited through Amazon's Mechanical Turk website.

Studying involvement is very critical in customized marketing and social psychology and its effect on consumer behavioral intentions (Krugman, 1966). Due to its effect on behavior, marketers have been studying the concept of involvement for more than 30 years (Broderick, 2007). Involvement, construct in this sense, has also been used as a segmentation tool for understanding repurchase behavior for tourism and events (Laurent & Kapferer, 1985; Zaichkowsky & Sood, 1989). While some argue that this construct has been underutilized in market segmentation approaches (Beane & Ennis, 1987), there has been substantial contribution of this construct in tourism and leisure fields as a segmentation variable (Bolting, 1988).

High levels of involvement have greater personal relevance and consequence than the low involvement (Sherif & Hovland, 1961, as cited in Petty et al., 1983; Krugman, 1965). The

consumer will persistently and energetically pay attention to the product and more precisely learn and recall the information. Low consumer involvement occurs when the object/service/activity has little relevance to him/her and needs very minimal information processing endeavor (El Aoud & Neeley, 2008). Moderately involved consumers are those who feel the object/service/activity has peripheral importance and comprises some evaluation of alternatives. Han (1992) through the study of advertisement size effect observed that people who were highly involved and had an interest to the advertisement responded more attentively to the bigness and smallness of the ads. While those who were uninterested, with low levels of involvement, non-significantly observed the ads when the sizes were changed.

In this study, the involvement dimension will be evaluated through the amalgamation and refinement of two popular scales developed by Laurent and Kapferer (1985) named consumer involvement profile (CIP) and the hybrid scale of McQuarrie and Munson (1987), often referred to as revised personal involvement inventory (RPII). It resulted in 12-item, seven-point semantic differential scale for measuring the meaning of involvement adapted to current study including important-unimportant, relevant-irrelevant, risky-not risky, appealing-unappealing and so on.

Further in terms of tacit agricultural knowledge, agricultural demographics (agrographics) is introduced and devised through the exhaustive literature review through a nine-item, five point Likert scale statements; Such as “I am involved in cultivating crops for sale to others”, “I visit and help friends involved in farming” and “I am involved in cultivating a vegetable garden for personal consumption”. Nonetheless, for this study, prior experience is interpreted and inferred to be enriching the knowledge of a person toward the pictured agritourism farmlands. This achieved when that any of agriliteracy scales failed to fit the study even the highly cited one by Frick (1990).

. Namely, we manipulated a set of agricultural landscapes, creating 6 matched pairs of images (Figure 1) identical to each other except for the particular visual logic being investigated in each pair. The manipulations included: a) changing color weight of some landscape elements, b) switching key elements between foreground and background, and c) convergence/divergence of lines toward specific elements. These manipulations were done in Photoshop software and then inserted into the body of a Qualtrics online survey with one of the images in each pair randomly selected for each respondent. For each image, respondents were asked to “identify three points that

make it most appealing for a leisure trip visit”. The count data will be gathered through putting masks on each region which will automatically record the clicks per region. (Figure 2).

Heat maps of the responses will be compared visually (which are automatically generated by Qualtrics)—e.g., pilot test data are summarized in the heat maps in Figure 1. The denser the clicks, that is the more clicks per each pixel, the redder the color of clicked regions. In addition, the count data for each manipulation will be compared through the binary logistic regression modeling to see if the three dimensions really were effective in terms of directing people’s attention into specific parts of images. The moderating role of the three factors will be analyzed according to the method of Baron and Kenny (1986). In this case four conditions need to be met and three regressions be carried out. First, the independent variable must affect the moderator and second, the moderator also needs to affect the dependent variable while controlling for the effect of independent variable. Third, the independent variable must directly affect the dependent variable and last, if the moderating factor is controlled, the relation between the independent variable and the dependent variable must be reduced or become nonsignificant.

Preliminary data collected through a pilot test with a convenience sample of 165 informants, suggests that the three dimensions of direction principle have a moderate effect on how informants perceive the visual appeal of agricultural landscapes. By color weight and overlap dimensions completely and the perspective partially substantiated. The moderating role of three factors have not yet been tested. Data collection will be completed in January.

## References

- McFarlane, B. L., Boxall, P. C., & Watson, D. O. (1998). Past experience and behavioral choice among wilderness users. *Journal of Leisure Research*, 30, 195-213.
- Watson, A. E., Roggenbuck, J. W., & Williams, D. R. (1991). The influence of past experience on wilderness choice. *Journal of Leisure Research*, 23(1), 21-36.
- White, D. D., Virden, R. J., & Van Riper, C. J. (2008). Effects of place identity, place dependence, and experience-use history on perceptions of recreation impacts in a natural setting. *Environmental Management*, 42(4), 647-657.

- White, D. D., Virden, R. J., & Van Riper, C. J. (2008). Effects of place identity, place dependence, and experience-use history on perceptions of recreation impacts in a natural setting. *Environmental Management*, 42(4), 647-657.
- Bandyopadhyay, R., & Morais, D. (2005). Representative dissonance: India's self and western image. *Annals of Tourism Research*, 32(4), 1006-1021.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of personality and social psychology*, 51(6), 1173.
- Beane, T. P., & Ennis, D. M. (1987). Market segmentation: a review. *European Journal of Marketing*, 21(5), 20-42.
- Birney, E., Stamatoyannopoulos, J. A., Dutta, A., Guigó, R., Gingeras, T. R., Margulies, E. H., ... & Kuehn, M. S. (2007). Identification and analysis of functional elements in 1% of the human genome by the ENCODE pilot project. *Nature*, 447(7146), 799-816.
- Bolting, C. P. (1988). Integrating consumer involvement and product perceptions with market segmentation and positioning strategies. *Journal of Consumer Marketing*, 5(2), 49-57.
- Broderick, A. J. (2007). A cross - national study of the individual and national–cultural nomological network of consumer involvement. *Psychology & Marketing*, 24(4), 343-374.
- Cohen, E. (1993). The study of touristic images of native people: Mitigating the stereotype of a stereotype. *Tourism research: Critiques and challenges*, 36-69.
- Echtner, C. M., & Prasad, P. (2003). The context of third world tourism marketing. *Annals of Tourism research*, 30(3), 660-682.
- El Aoud, N. H., & Neeley, S. M. (2008). Teenager–peer interaction and its contribution to a family purchase decision: The mediating role of enduring product involvement. *International Journal of Consumer Studies*, 32(3), 242-252.
- Frick, M. J. (1990). A definition and the concepts of agricultural literacy: A national study.
- Gao, J., Barbieri, C., & Valdivia, C. (2013). Agricultural landscape preferences: Implications for agritourism development. *Journal of Travel Research*, 0047287513496471.

- Han, J. K. (1992). Involvement and advertisement size effects on information processing. *Advances in consumer research*, 19(1).
- Krugman, H. E. (1965). The impact of television advertising: Learning without involvement. *Public opinion quarterly*, 29(3), 349-356.
- Krugman, H. E. (1966). The measurement of advertising involvement. *Public Opinion Quarterly*, 30(4), 583-596.
- Laurent, G., & Kapferer, J. N. (1985). Measuring consumer involvement profiles. *Journal of marketing research*, 41-53.
- McQuarrie, E. F., & Munson, J. M. (1987). The Zaichkowsky personal involvement inventory: modification and extension. *Advances in consumer research*, 14(1), 36-40.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of marketing research*, 460-469.
- Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and peripheral routes to advertising effectiveness: The moderating role of involvement. *Journal of consumer research*, 135-146.
- Sherif, M., & Hovland, C. I. (1961). Social judgment: Assimilation and contrast effects in
- Smith, J. B., & Colgate, M. (2007). Customer value creation: a practical framework. *Journal of marketing Theory and Practice*, 15(1), 7-23.
- Van Leeuwen, T., & Jewitt, C. (Eds.). (2001). *The handbook of visual analysis*. Sage.
- Zaichkowsky, J. L., & Sood, J. H. (1989). A global look at consumer involvement and use of products. *International Marketing Review*, 6(1).



*Figure 1.* Changing the objects' positions in foreground, middle ground and background to see if overlap dimension has made an effect.



*Figure 2.* Putting masks on each region enabling us to enumerate the frequency counts on each region.